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Total Number of Pages in This Submission

Application Number	10/687,454
Filing Date	October 16, 2003
First Named Inventor	Daniel Scott Homa
Art Unit	1731
Examiner Name	Queenie S. Dehghan
Attorney Docket Number	Homa 073103-1

**ENCLOSURES (Check all that apply)**

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Remarks

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	Wendy W. Koba, Esq.		
Signature			
Printed name	Wendy W. Koba		
Date	October 19, 2007	Reg. No.	30509

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**EXPRESS MAIL  
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**Patent Application for:**

**Applicants:** Daniel Scott Homa

**Atty. No:** Homa 073103 -1

**Title:** Hydrogen Resistant Optical Fiber  
Formation Technique

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IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

Patent Application

Inventor(s) Daniel Scott Homa

Case 073103-1

Conf. No. 8739

Serial No. 10/687,454

Group Art Unit 1731

Filing Date October 16, 2003

Examiner Queenie S. Dehghan

Title Hydrogen Resistant Optical Fiber Formation Technique

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VA 22313

SIR:

Response to Notice of Non-Compliant Appeal Brief

In response to the *Notice of Non-Compliant Appeal Brief* dated September 25, 2007, and in accordance with the provisions of MPEP 1205.03(B), applicant is submitting this paper providing a summary of the claimed subject matter as required by 37 CFR 41.37(c)(1)(v).

**SUMMARY OF CLAIMED SUBJECT MATTER** (Section VI of Appeal Brief)

The following is a concise explanation of the subject matter as defined in independent claims 1 and 19, referring to the specification by page and line number, and the associated drawings. In particular, reference is made to the specification at page 2, line 28 (i.e., paragraph [0009]) where it states:

An initial unsintered porous soot is first formed on the inner surface of a preform tube. The unsintered soot can be deposited by a method similar to that used for solution doping of a fiber preform, where an extremely porous, unsintered soot is subsequently used as a “sponge” for absorbing a liquid dopant. In the process of the present invention, the extremely porous unsintered soot is then subjected to a flow of a metal halide (e.g.,  $\text{SiCl}_4$ ) in an environment of, for example, He and/or  $\text{N}_2$  for a predetermined period of time. *Importantly, no oxygen is present during this flow process.* The resulting structure is then sintered in a  $\text{SiCl}_4/\text{He}/\text{N}_2$  environment to form the amorphous glass and collapsed to form the final preform structure. [emphasis added]

Reference is made to FIGs. 1-3, where the process steps in FIGs. 1 and 2 illustrate the presence of oxygen for the initial steps. In contrast, the step of independent claims 1 and 19 related to introducing a metal halide to the unsintered soot (FIG. 3) does not include oxygen as one of the ambient gasses. The following sintering step, as illustrated in FIG. 4, likewise does not include oxygen as one of the ambient gasses.

#### Concise explanation of independent claim 1

Independent claim 1 is directed to a “method of making an optical preform”, and includes a step of “depositing a porous, unsintered soot layer within the inner surface of said tube” followed by a step of “exposing the porous, unsintered soot layer to a flow of a metal halide in a oxygen-free ambient for a period of time sufficient to eliminate the presence of excess oxygen defects in said soot layer”; then following with a step of “sintering the metal halide-treated soot layer in an oxygen-free ambient to form an amorphous glass layer”. [emphasis added]

#### Concise explanation of independent claim 19

Independent claim 19 is directed to a “method of making an optical preform” including a step of “depositing a porous, unsintered soot layer”, followed by a step of “sintering the soot layer in an oxygen-free environment of  $\text{SiCl}_4$ , He and  $\text{H}_2$  to form an amorphous glass layer”.

With the filing of this paper, appellant believes that the brief associated with the above-identified application is now in full compliance with the requirements of 37 CFR

41.37. If any questions remain, the Examiner or the Appeal Board is invited to contact appellant's attorney at the telephone number given below.

Respectfully submitted,

Daniel Homa

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Date: October 19, 2007